Defense Information Systems Agency

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Computing Services IT Service Continuity Management

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ITSCM Definition

ITIL Definition: "The process responsible for managing risks that could seriously affect IT Services. ITSCM ensures that the IT Service Provider can always provide minimum agreed Service Levels, by reducing the Risk to an acceptable level and Planning for the Recovery of IT Services. ITSCM should be designed to support Business Continuity Management."

Goal "To support the Business Continuity Management process by ensuring that the required IT technical and service facilities (including computer systems, networks, applications, data repositories, telecommunications, environment, technical support and Service Desk) can be resumed within required, and agreed, business timescales."

Computing Services' Mission

To deliver computing information products and services that enable and enhance the warfighters' ability to execute the mission.

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ITSCM Team - Certified Planners

- **Responsibilities:**
  - **Provide policy, standards, templates, oversight**
  - **Liaison for exercise planning and execution**
  - **Interface with Customer Support account managers and DECC technical staff**
  - **Produce After Action Report and follow-up**
- **Point of contact for Business Continuity Plans**
  - **Based on best practices from Disaster Recovery Institute International, Business Continuity Institute**
  - **Developed for all DISA Computing Services sites**
  - **Structured walkthroughs**
  - **Annual Reviews**
  - **Exercises**

Identifying Requirements

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- DoDI 8500.2 establishes minimum requirements
- Actual requirements may vary based on MAC Level
  - One size does not fit all:
    - The 5 day recovery window is not effective for critical applications
    - A 4-hour recovery solution is not cost effective for non-critical applications
- Solution will address
  - Pre-defined recovery procedures
  - Data backup processes
  - Exercises (scheduled by contacting your account manager)

Service Level Agreements

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- **Mainframe**
  - **Default COOP coverage requires no additional documentation**
  - **Custom solutions (more stringent requirements) must be documented in SLA if desired**
- **Server-based**
  - **The default is NO COOP coverage**
  - **Desired COOP options must be specifically identified and documented in SLA**
- **Mixed Platform Systems**
  - **Only mainframe portion has default coverage**
  - **Server portion has no default coverage**

Recovery Environments

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- **IBM & Unisys Assured Computing Environment**
  - **Included in standard rates**
  - **Architected to meet MAC II minimum requirements**
    - **Recovery Time Objective (RTO) and Recovery Point Objective (RPO) of 24 hours or less**
  - **Dedicated infrastructure for recovery and exercise mission**
  - **Access to the DISA COOP exercise program**
- **Server-based Environment**
  - **Not included in standard rates**
  - **Multiple RTO and RPO levels to choose from**
    - **Architected to customer's MAC-level requirements**
  - **May include either dedicated or shared infrastructure elements**
  - **Must be documented in Service Level Agreements**

Server Recovery Solutions

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- **Remote Shared: Can take several days to reconstitute**
  - Hardware Services rate for each COOP OE = 0.25 * Hardware Services rate
  - No additional cost for Basic Services
- **Local or Remote Dedicated (resources are not shared): Less than 24 hours to reconstitute…some manual intervention, which can be reduced through data replication**
  - Operating systems are patched at same level as production servers
  - Hardware Services rate for each COOP OE = 1.0 * Hardware Services rate
  - Basic Services rate for each COOP OE = 0.5 * Basic Services rate
- **Local or Remote Dedicated Clustered: Failover is virtually automatic and virtually instantaneous**
  - Extra-cost software is required
  - Hardware Services rate for each COOP OE = 1.25 * Hardware Services rate
  - Basic Services rate for each COOP OE = 0.5 * Basic Services rate

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Server-Based Recovery Options

Options	MAC Level	Description	RTO/RPO
Remote Recovery Combination 1	MAC III	Remote recovery using tape-based data backups and shared processing capability at a designated recovery site	RPO < 7 Days; RTO < 5 Days
Remote Recovery Combination 2	MAC II	Remote recovery using backup data stored at the recovery site and pre-configured processing capability	RPO & RTO <24 Hours
Remote Recovery Combination 3	MAC II	Remote recovery using backup data stored at the recovery site and in an on-line state as well as pre-configured processing capability	RPO & RTO <8 Hours
Remote Recovery Combination 4	MAC I	Remote recovery using near-synchronous replication of data stored at the recovery site and in an on-line state as well as dedicated, pre-configured and operational processing capability	RPO<1 Sec; RTO<30 Min

Note: All options for remote recovery rely on a combination of designated infrastructure and available backup data.

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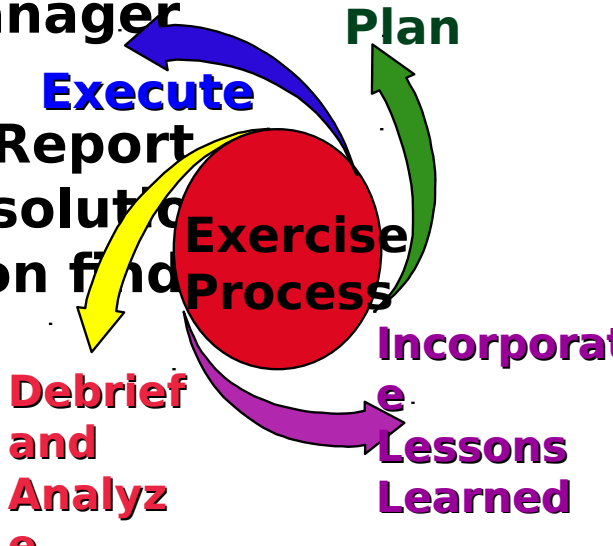
Exercises

- **Scheduling**
  - **Survey of Customer Requirements**
    - **Late spring/early summer for coming fiscal year**
    - **Customers and CARs identify applications/systems & type (tabletop/simulation)**
  - **Coordinate and Distribute Exercise Schedule Prior to beginning of fiscal year**

- **Process**
  - **ITSCM Team develops exercise plan in conjunction with production site and account manager**
  - **Facilitate exercise according to plan**
  - **Develop and distribute After Action Report**
  - **Track After Action issues through resolut**
  - **Update recovery procedures based on fi**



Summary

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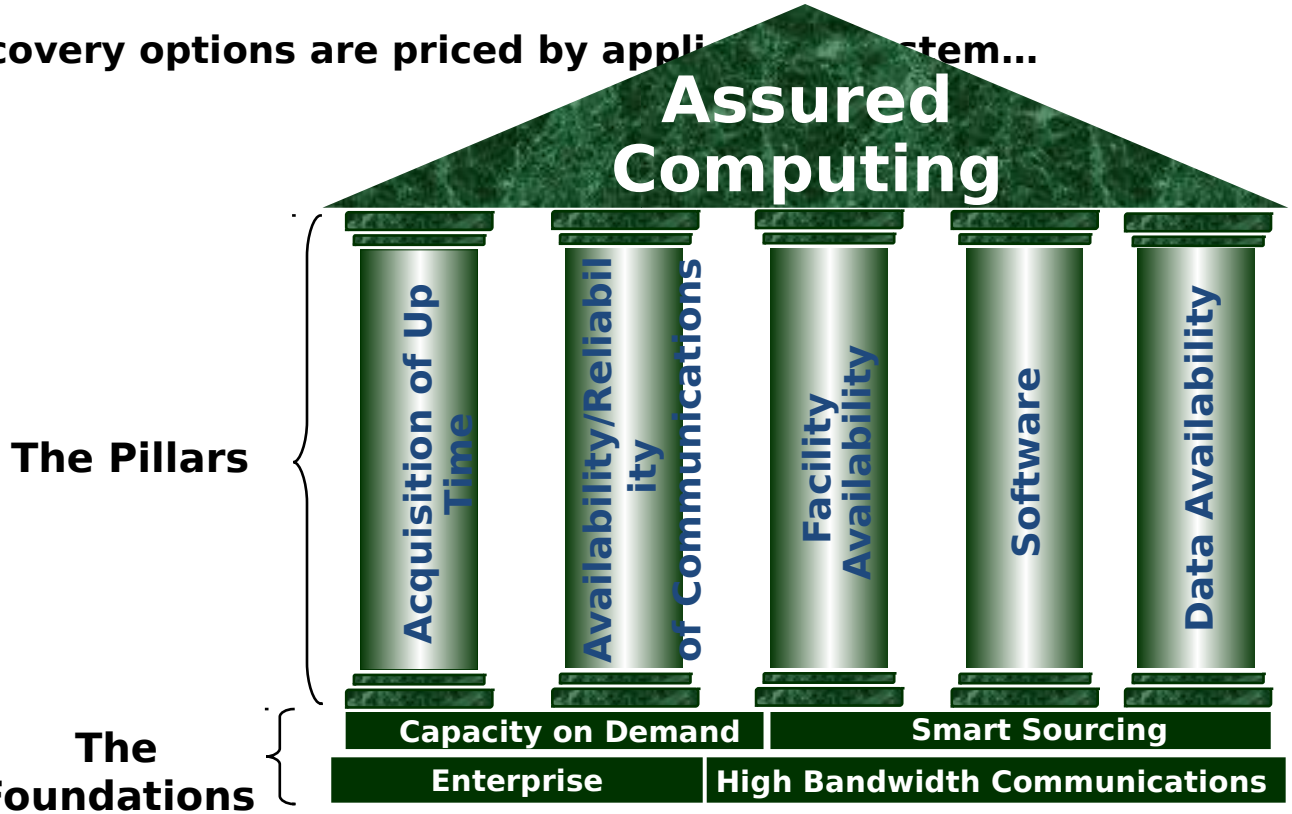
Availability-- Reliability -- Security --Scalabilit

- **Customers identify requirements with their account manager**
- **Analyze server applications**
  - **Determine criticality of system, Recovery Time Objective (RTO), and Recovery Point Objective (RPO)**
  - **Availability and recovery options are priced by appli… stem…**



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ITSCM Team Accomplishments

- **Service Continuity Exercises (FY09)**
  - 10 Table-top and 6 Simulation Exercises completed
  - 25 Table-top and 7 Simulation Exercises remaining
  - 145 total applications included in FY09 Exercise Program
- **Policy and Process Updates**
  - Strengthened After-Action tracking, reporting and resolution
  - Developed additional exercise monitoring processes
  - Provided updates to Catalog of Services and SLA template
  - Developed and published Server COOP Customer List
- **Efforts related to Audit Compliance**
  - Began reporting DIACAP/DITPR data to DISA offices
  - Developed compliance letter to streamline DIACAP reporting to and for customers

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